



Update on the Development of a Electric Reliability Standard Manual

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Reliability Standard Manual

- ▶ Staff has been reviewing
 - ▶ NERC Reliability Standards and Manuals
 - ▶ Alaska Electric Railbelt Standards (I-16-002)
- ▶ In light of differing pieces of proposed legislation, it has been determined to use the phrase “Electric Reliability Organization (ERO)” in the development of the Reliability Standard Manual (Manual).
- ▶ Development of the Manual’s Structure
- ▶ Table of Content of the proposed Manual

Reliability Standard Manual

- ▶ ARTICLE
 - ▶ 000. General
 - ▶ 100. Development of Standards
 - ▶ 200. Approval Process for Standards
 - ▶ 300. Approved Standards
 - ▶ 400. Standards to be Developed
 - ▶ 500. (Reserved)
 - ▶ 600. Compliance and Enforcement
 - ▶ 700. Revenue Requirement, Supporting Information, and Monitoring
 - ▶ 800. Definitions
- ▶ Foreword
 - ▶ Part 1 – General
 - ▶ Part 2 – Development of Standards
 - ▶ Part 3 – Approval Process for Standards
 - ▶ Part 4 – Approved Standards
 - ▶ Part 5 – Monitoring, Compliance, and Enforcement
 - ▶ Part 6 – Standards to be Developed
 - ▶ Part 7 Revenue Requirement and Supporting Information
 - ▶ Part 8 – Glossary of Terms

Reliability Standard Manual

Table of Content

- ▶ Foreword
 - ▶ Staff developed a draft. The draft is currently under review by the Administrative Law Judge assigned to the proceeding.
- ▶ Part 1 – General
 - ▶ 1.0 Application and Purpose
 - ▶ 1.1 Reserved

Reliability Standard Manual

Table of Content

- ▶ **Part 2 – Development of Standards**
- ▶ 2.0 General
- ▶ 2.1 Essential Attributes for Technically Excellent Reliability Standards
 - ▶ 2.1.1. Applicability.
 - ▶ 2.1.2. Performance Requirement or Outcome—
 - ▶ 2.1.3. Measurability —.
 - ▶ 2.1.4. Technical Basis in Engineering and Operations
 - ▶ 2.1.5. Completeness
 - ▶ 2.1.6. Consequences for Noncompliance.
 - ▶ 2.1.7. Clear Language
 - ▶ 2.1.8. Practicality.
 - ▶ 2.1.9. Consistent Terminology.

Reliability Standard Manual

Table of Content

- ▶ 2.2 Relationship between Reliability Standards and Competition
 - ▶ 2.2.1. Competition.
 - ▶ 2.2.2. Market Structures.
 - ▶ 2.2.3. Market Solutions.
 - ▶ 2.2.4. Commercially Sensitive Information.
 - ▶ 2.2.5. Adequacy.

Reliability Standard Manual

Table of Content

- ▶ 2.3 Essential Principles for the Development of Reliability Standards
 - ▶ 2.3.1. Openness.
 - ▶ 2.3.2. Transparency.
 - ▶ 2.3.3. Consensus-building —.
 - ▶ 2.3.3.1 Voting Process
 - ▶ 2.3.4. Ethical Participation
 - ▶ 2.3.5. Fair Balance of Interests.
 - ▶ 2.3.6. Due Process.
 - ▶ 2.3.7. Timeliness

Reliability Standard Manual

Table of Content

- ▶ 2.4 Organization Registration
 - ▶ 2.4.1. Responsibility-
 - ▶ 2.4.2. Subject to the compliance monitoring
 - ▶ 2.4.3. Organization Registration Process
- ▶ 2.5 Entities that are considered as owner, operator, or end user of Bulk Power System
 - ▶ 2.5.1 Entities:
- ▶ 2.6 Standards Process Management
- ▶ 2.7 Steps in the Development of Reliability Standards
 - ▶ 2.7.1. Procedure —.
 - ▶ 2.7.2: Types of Reliability Requirements
- ▶ 2.8 Elements of a Reliability Standard

Reliability Standard Manual

Table of Content

- ▶ 2.9 RCA Approval —
- ▶ 2.10 Annual Reliability Standards Development Plan.
- ▶ 2.11 Conflicts with Statutes, Regulations, and Orders Notice of Potential Conflict.
 - ▶ 2.11.1. Determination of Conflict —
 - ▶ 2.11.2. Regulatory Precedence
- ▶ 2.12 Revisions to ERO Standard Processes Manual.
- ▶ 2.13 Periodic Review of Reliability Standards
- ▶ 2.14 Archived Standards Information
- ▶ 2.15 Procedure for Developing and Approving Violation Risk Factors and Violation Severity Levels
 - ▶ 2.15.1. Development of Violation Risk Factors and Violation Severity Levels —
 - ▶ 2.15.2. Remands of Directed Revision of VRFs and VSLs by Applicable
 - ▶ 2.15.3. Alternative Procedure for Developing and Approving Violation Risk Factors and Violation Severity Levels —

Reliability Standard Manual

Table of Content

- ▶ **Part 3 – Approval Process for Standards**
 - ▶ 3.0 General
 - ▶ 3.1 Filing Procedures
 - ▶ 3.2 Transparent and Public Regulations Approval Process
 - ▶ 3.3 Remanded Reliability Standards and Directives to Develop Standards
 - ▶ 3.4 Directives to Develop Reliability Standards under Extraordinary C Circumstances —

Reliability Standard Manual

Table of Content

► Part 4 – Approved Standards

- 4.0 General
- 4.1 Standards effective June XX, 2019
 - 4.1.1 Alaska Railbelt Standard AKBAL-001-2
 - 4.1.1.1 Attachment 1-AKBAL-001-2
 - 4.1.2 Alaska Railbelt Standard AKBAL-002-2
 - 4.1.3 Alaska Railbelt Standard AKBAL-003-2
 - 4.1.4 Alaska Railbelt Standard AKBAL-004-2
 - 4.1.5 Alaska Railbelt Standard AKBAL-005-2

Reliability Standard Manual

Table of Content

Part 4 – Approved Standards (continued)

- ▶ 4.1.6 Alaska Railbelt Standard AKBAL-006-2
- ▶ 4.1.7 Alaska Standard KBAL-502-2
- ▶ 4.1.8 Alaska Railbelt Standard AKFAC-001-2
- ▶ 4.1.9 Alaska Railbelt Standard AKFAC-002-2
- ▶ 4.1.10 Alaska Railbelt Standard AKINT-001-2
- ▶ 4.1.11 Alaska Railbelt Standard AKMOD-025-2
 - ▶ 4.1.11.1 AKMOD-025 Attachment 1
 - ▶ 4.1.11.2 AKMOD-025 Attachment 2
 - ▶ AKMOD-025 Attachment 3

Reliability Standard Manual

Table of Content

► **Part 4 – Approved Standards (continued)**

► 4.1.12 Alaska Railbelt Standard AKMOD-026-2

► 4.1.12.1 AKM OD-26 Attachment 1

► 4.1.13 Alaska Railbelt Standard AKMOD-027-2

► 4.1.13.1 AKMOD-27 Attachment 1

► 4.1.14 Alaska Railbelt Standard AKMOD-028-2

► 4.1.14.1 AKMOD-028 Attachment 1

► 4.1.15 Alaska Railbelt Standard AKMOD-032-2

► 4.1.15.1 MOD-032-01 Attachment 1

► 4.1.16 Alaska Railbelt Standard AKMOD-33-2

► 4.1.16.1 AKMOD-033 Attachment 1

► 4.1.17 Alaska Railbelt Standard AKPRC-006-2

► 4.1.17.1 AKPRC-006 Attachment 1

Reliability Standard Manual

Table of Content

Part 4 – Approved Standards (continued)

- ▶ 4.1.18 Alaska Railbelt Standard AKRES-001-2
 - ▶ 4.1.19 Alaska Railbelt Standard AKTPL-001-2
 - ▶ 4.1.20 Alaska Railbelt Standard AKVAR-001-2
 - ▶ 4.1.21 Alaska Railbelt Standard AKVAR-002-2
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- ▶ 4.2 Standard developed in accordance with this Manual.

Reliability Standard Manual

Table of Content

► **Part 5 – Monitoring, Compliance, and Enforcement**

► Items of concern:

- Missing DCS Form, “Alaskan Railbelt Control Performance Standard Survey – All Interconnections” or equivalent form to its Reliability Organization
- No examples of auditing process, forms, or documentation was included.
- No risk assessment information was included.
- Most compliance processes rely on self-audit / self-certification.

Reliability Standard Manual

Table of Content

▶ **Part 6 – Standards to be Developed**

- ▶ 6.0 General
- ▶ 6.1 Resource and Demand Balancing
- ▶ 6.2 Critical Infrastructure Protection
- ▶ 6.3 Communications
- ▶ 6.4 Emergency Preparedness and Operations
- ▶ 6.5 Facilities Design, Connections, and Maintenance
- ▶ 6.6 Interchange Scheduling and Coordination
- ▶ 6.7 Interconnection Reliability Operations and Coordination
- ▶ 6.8 Modeling, Data, and Analysis

Reliability Standard Manual

Table of Content

- ▶ **Part 6 – Standards to be Developed (continued)**

- ▶ 6.9 Nuclear (Staff is working on recommendations to remove this sector from the Standards to be Developed.)
- ▶ 6.10 Personnel Performance, Training, and Qualifications
- ▶ 6.11 Protection and Control
- ▶ 6.12 Transmission Operations

Reliability Standard Manual

Table of Content

► **Part 7 - Revenue Requirement and Supporting Information**

- 7.0 General
- 7.1 Scope of Business Plans and Budgets
- 7.2 ERO Funding and Cost Allocation
- 7.3 ERO Budget Development
- 7.4 Submittal of ERO to RCA for Approval
- 7.5 ERO Billing and Collections
- 7.6 Penalty Applications
- 7.7 Special Assessments

Reliability Standard Manual

Table of Content

- ▶ **Part 8 – Glossary of Terms**

- ▶ 8.1 General
- ▶ 8.2 Terms used in Standards found in Part 4
- ▶ 8.3 Terms used in other parts of the Manual